

REMARKS

This paper is submitted in reply to the Office Action dated December 29, 2003, within the three-month period for response. Reconsideration and allowance of all pending claims are respectfully requested.

In the subject Office Action, claim 1-3, 9, 15-16, and 23 were objected to based upon informalities. In addition, claims 13-14 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. US 2003/0159074 to Murphy et al. The Examiner did indicate, however, that claims 1-12, and 15-30 were directed to patentable subject matter.

Applicants respectfully traverse the Examiner's rejections to the extent that they are maintained. Applicants have amended claims 1-3, 9, 15-16 and 23 herein, and Applicants respectfully submit that no new matter is being added by the above amendments, as the amendments are fully supported in the specification, drawings and claims as originally filed.

First turning to the claim objections in the subject Office Action, the Examiner will note that all of the suggestions made by the Examiner have been incorporated into the objected-to claims. With respect to claim 1, the Examiner will note that the original claim was intended to convey that the detection of a failure is performed by a first group member resident on a first node in a clustered computer system. Moreover, with respect to claims 15 and 16, the Examiner should note that the designation of particular steps with "(a)", "(b)", etc. labels was not intended to convey any particular ordering or grouping of steps. Finally, given that the amendments made herein do not alter the scope of any of the amended claims, Applicants have surrendered no subject matter as a result of these amendments.

Withdrawal of the claim objections is therefore respectfully requested.

Next turning to the claim rejections, and specifically to the rejection of independent claim 13, this claim generally recites a method of shutting down a node in a

Page 9 of 11
Serial No. 09/827,804
Amendment and Response dated March 29, 2004
Reply to Office Action of December 29, 2003
IBM Docket: ROC920000312US1
WH&E IBM/180
K:\ibm\180\Amendment and Response to 12-29-03 OA.wpd

clustered computer system. The method includes *inter alia* the initiation of the shutdown of a node using a group member that is resident on the node.

In contrast, the reference cited by the Examiner (Murphy et al.) discloses a technique for enabling a sub-cluster to take over the services of another sub-cluster, in which shutdown of a sub-cluster is initiated by an "integrity protector". In particular, paragraph [0031], cited by the Examiner, discloses the formation of sub-clusters in response to a fragmentation of a cluster of nodes. Paragraph [0030] discloses that integrity protectors are provided in each node to ensure that "at most one sub-cluster remains active while the other sub-clusters are shutdown." Paragraph [0031] also discloses that the integrity protectors initiate a "vote count" between nodes to determine whether a particular sub-cluster has a majority of votes available. For sub-clusters that do not have the majority of votes, their respective nodes are shutdown.

Thus, in Murphy et al., it is an integrity protector that initiates the shutdown of a node in a non-majority sub-cluster. However, claim 13 recites that initiation of a node shutdown is performed by a member of a group resident on that node.

There is no disclosure in Murphy et al. that indicates that an "integrity protector" is a member of a group. As discussed at page 2, lines 1-5 of the Application, a group is a collection of related jobs or processes cooperatively executing on different nodes to handle a computer task. Such cooperative jobs (referred to as "members") are typically capable of communicating with one another, and are assigned a common identifier to indicate common membership in a group.

Integrity protectors are described in detail in Murphy et al. in connection with Figs. 2C, 3 and 4A-4B. At nowhere in the reference are these integrity protectors referred to as group members, or any other type of entity that is analogous to a group member.

Given that "integrity protectors" are not group members, therefore, claim 13 is novel over Murphy et al., and the rejection of claim 13 should be withdrawn.

Page 10 of 11
Serial No. 09/827,804
Amendment and Response dated March 29, 2004
Reply to Office Action of December 29, 2003
IBM Docket ROC920000312US1
WH&E IBM/180
K:\bna180\Amendment and Response to 12-29-03 OA.wpd

Claim 13 is also non-obvious over Murphy et al. as there is no suggestion in the reference of the desirability of initiating a node shutdown using a member of a group. The Examiner has provided no evidence that one of ordinary skill in the art would be motivated to modify Murphy et al. to initiate a node shutdown operation using a member of a group. Accordingly, claim 13 is also non-obvious over Murphy et al. Reconsideration and allowance of claim 13, and of claims 14-19 which depend therefrom, are therefore respectfully requested.

In summary, Applicants respectfully submit that all pending claims are novel and non-obvious over the prior art of record. Reconsideration and allowance of all pending claims are therefore respectfully requested. If the Examiner has any questions regarding the foregoing, or which might otherwise further this case onto allowance, the Examiner may contact the undersigned at (513) 241-2324. Moreover, if any other charges or credits are necessary to complete this communication, please apply them to Deposit Account 23-3000.

Respectfully submitted,

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Date



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